DECLARATION OF MARTIN BOSMA

I, Martin Bosma declare as follows:

My name is Martin Bosma. I am presently a Senior Production Technologist for Nederlandse Aardolie Maatschappij B.V., Assen the Netherlands and named inventor on the above-referenced patent application. I am more than 18 years of age, have not been convicted of a felony or a crime of moral turpitude, am of sound mind, and am competent to make this Declaration.

I have performed research in Shell E & P Technology, located in the Hague, the Netherlands. As a member of the Shell's Expandable Tubulars Team, I have been mainly dealing with the zonal isolation aspects of well completion technology. I have also performed research involving well completion devices that employ swellable materials. Previously, I have fulfilled various petroleum engineering positions in Nederlandse Aardolie Maatschappij (NAM) and Sabah Shell Petroleum Co., Malaysia. I began my career with Shell over 28 years ago in the company's Exploration and Production Center (KSEPL) at Rijswijk, The Netherlands, as a fracturing and well stimulation specialist.

I have reviewed the patent application identified by serial number 10/526,510 as well as the Kilaas reference, US patent 6,672,385 B2. I have reviewed the Office Action mailed 30 April 2007, in which the Examiner rejects the 10/526,510 application over the Kilaas reference.

I have reviewed the Response to the Office Action mailed 30 April 2007. I agree with the statement that extending the swellable material around the perforated tubular conduit solves the problem of improving the seal between the formation and the wellbore device. From my experience, arranging the layers of components in this way would provide a seal that is not possible with a system such as the one described in Kilaas.

When swellable elastomers were first used in conjunction with perforated tubing, they were not used in the configuration presented in 10/526,510. It was not obvious to position the swellable elastomer on the outside of the tubing because of a perceived risk of damage to the swellable material during installation of the wellbore device. Through experimentation, we determined that the annulus between the water swelling elastomer and the formation will be more effectively closed by the swollen elastomer in this configuration. Hence vertical encroachment of water from the water table via the formation into a higher (yet oil bearing) part of the well is prevented.

I am aware that willful false statements and the like are punishable by fine or imprisonment, or both under Title 18 U.S.C. §1001 and may jeopardize the validity of the application or any patent issuing hereon. All statements made herein are made based on my own knowledge are true and that all statements made on information and belief are believed to be true.

Martin Bosma 

ASSEN

Date: 16 July 2007